

# REGIONAL PARKS

EAST BAY REGIONAL PARK DISTRICT

February 28, 1995

Ms. Medhulla Logan  
Hazardous Materials Specialist  
Alameda County Environmental Health  
1131 Harbor Bay Parkway, #250  
Alameda, CA 94502-6577

Subject: Redwood Regional Park Service Yard,  
Oakland, California

Dear Ms. Logan:

We did receive and have reviewed your certified letter of comment dated January 25, 1995, regarding our January 10, 1995 "Quarterly Progress Report I." You identified four (4) issues that remain to be resolved to the satisfaction of your Department. This letter of response will address those issues.

Issue 1: A confirmation soil sample collected in June 1993 from a sidewall in the excavation pit (Sample E3-16) contained 12,000 ppm TPHg. Was this contaminated soil removed?

Response: Approximately 600 cu. yds. of contaminated soil were removed creating a large open pit.

Due to unfavorable site conditions that included steep uphill contours adjacent to the pit, vertical walls in the pit created as a result of excavation from the road surface down to about 20 feet, and moist sidewall soil conditions due to presence of a groundwater seep, a decision was made to backfill the pit with clean dirt to avoid a significant potential for a landslide. A consensus to backfill and not excavate any further was developed by an on-site decision involving our consultants, several of our construction and engineering staff as well as regulatory agency personnel including Juliet Shin from your office.

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Although some potential exists for the soil containing 12,000 ppm TPHg to extend the time frame for site remediation by continuing to leach, we believe the subsequent data indicates such high concentration was very localized and will have minimal influence on overall site remediation. The 12,000 ppm TPHg sample (E3-16) was collected at approximately 16 feet depth adjacent to the southwest corner of the location of the removed underground gas tank. Subsequent soil samples collected in September 1993 from exploratory boreholes (B3, B4, B9, and B12) down gradient within 30-40 feet resulted in sample concentrations that were much lower (Table 4.1 attached). In addition, a permanent 36 feet deep monitoring well (MW-2) was developed to reflect the worst case condition, i.e. essentially at the E3-16 location. After one sampling event reported in "Quarterly Progress Report I", a soil sample collected at 21 feet depth contained a much lower concentration of 130 ppm TPHg (see Table 5.1 in the Monitoring Report). We believe at this time, that the 12,000 ppm TPHg value previously obtained was quite localized. Subsequent quarterly monitoring during the next 9 months should help clarify the significance of gas concentrations at that location.

Issue 2: What is the source of the stockpiled soil at Fire Station #2?

Response: This is the 600 cubic yards of contaminated soil removed from the underground tank pit. This location was chosen due to the flat terrain and it was within Redwood Park but away from the normal park visitor use areas. The soil was placed on top of plastic to prevent clean soil beneath from becoming contaminated and was "winterized" by covering the piles with plastic to prevent rainfall erosion or generation of runoff that could be contaminated. Prior to putting the soil at the location, the California Department of Fish and Game was contacted and their approval was granted.

Issue 3: Your Department never received confirmation that the 600 cubic yards of contaminated soil was transported to Sibley Regional Preserve for further aeration.

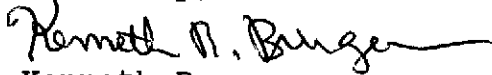
Response: Early rains prevented access by trucks necessary to haul the soil to Sibley. We plan to do this as soon as practicable once rains cease long enough for the dirt road to dry adequately. Your office will be notified in writing when this is completed. **Relocation to Sibley will allow the soil to be spread out more effectively and will enhance the aeration process.**

Issue 4: A significant threat to Redwood Creek exists by additional contamination transported from the groundwater. A more aggressive groundwater remediation program would be required to prevent this migration.

Response: On-going quarterly monitoring includes additional sampling for petroleum contaminants at specified locations in Redwood Creek. We believe that additional sampling provided in the remaining three (3) quarterly sampling events would be desirable to determine whether a more costly remediation effort is necessary. The existing groundwater monitoring wells appear to have bracketed the plume and data to provide a temporal trend in contaminant concentrations would be very helpful toward determining further remediation needs. If concentrations of benzene or other drinking water MCL's were significantly elevated rather than marginally (without effect of dilution), a more aggressive effort would warrant immediacy. However, due to seasonal trends in flow in the creek as well as seasonal groundwater fluctuation, we would like to generate a larger data base before initiating further costly remediation that might not give significant beneficial results.

The Park District is committed to abating any significant impacts to water resources due to the underground fuel tanks but request completion of additional analyses before proceeding with any needed expanded effort.

Sincerely,



Kenneth Burger  
Land Stewardship Manager  
East Bay Regional Park District

KB/fjb

cc: L. Feldman - RWQCB

Enclosure

**TABLE 4.1**  
**EXPLORATORY BOREHOLE SOIL SAMPLE ANALYTICAL RESULTS**  
 Redwood Regional Park Corporation Yard  
 Oakland, CA

Sample I.D.	Depth (ft bgs)	TPH-G	TPH-K	TPH-D	Benzene	Toluene	Ethyl- benzene	Total Xylenes
B1-11	11	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
B1-27	27	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
B2-11	11	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
B2-15	15	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
B3-12	12	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
B3-18	18	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
B4-18	18	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
B4-23	23	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
B5-11	11	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
B7-12	12	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
B8-4	4	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
B8-10	10	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
B9-11	11	370	NA	NA	1.7	7.9	6.9	34
B9-21	21	<1	NA	NA	0.1	0.011	0.017	0.069
B9-28	28	<1	NA	NA	<0.005	0.033 **	0.035	0.14
B10-6	6	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
B10-21	21	<1	<2	7	<0.005	<0.005	<0.005	<0.005
B11-11.5	11.5	<1	<2	<2	0.021	<0.005	<0.005	<0.005
B12-14.5 *	14.5	150	NA	NA	0.24	0.44 **	1.7	4.6
B12-15	15	77	NA	NA	0.15 **	0.24 **	0.9	2.7 **
B12-21	21	97	NA	NA	0.46	1.2	2	5.4
B13-12	12	1,500	NA	NA	<0.4	<0.4	13	78
B13-15	15	1,800	420	(a)	8.8	39	30	120
B14-18	18	210	50	(a)	0.17 **	0.1 **	0.34 **	0.63 **
B15-17	17	1,900	1,300	(a)	1.1 **	0.8 **	9.1	14 **
B16-17.5	17.5	50	NA	NA	<0.1	<0.1	0.2 **	0.2 **
B17-12.5	12.5	<1	NA	NA	<0.005	<0.005	<0.005	<0.005

**Notes:** TPH-G: Total Petroleum Hydrocarbons as Gasoline  
 TPH-D: Total Petroleum Hydrocarbons as Diesel Fuel  
 TPH-K: Total Petroleum Hydrocarbons as Kerosene

**<1** : Not Detected above method reporting limit (MRL) of 1 mg/Kg  
**NA** : Not Analyzed

(a) Diesel range not reported due to overlap of hydrocarbon ranges  
 \* Field duplicate (quality control sample)  
 \*\* Presence of this analyte confirmed by second column; however, the confirmation concentration differed from the reported result by more than a factor of two